

Technical Bulletin #61:

Harvesting and Postharvest Recommendations for Tomato

1. Quality Standards

- There are many different types of tomatoes; shapes, sizes, color and flavors. Therefore, before planting your crop, you have to discuss with your potential buyers what type of tomato they would like to buy, how much, and what their packing requirements are.
- In Cambodia, the most popular type of tomato is a medium size, globe shaped fruit usually harvested at the mature green stage.



2. Harvesting

- Depending on variety, tomatoes can be harvested from 60 to 70 days after transplanting.
- Harvesting tomato should be done every 2 to 3 days.
- Tomato should be harvested when mature-green (full size, shiny) or just turning red but still firm (7 to 8 on the grading scale).
- Harvesting should be done at the coolest time of the day, early in the morning from 6:00 to 10:00 am or in the afternoon from 4:00 to 6:00 pm.
- Do not harvest tomato when it is wet or after raining because high moisture could cause fungal or bacterial problems if kept long periods of time in storage
- Use a knife or scissors to cut the fruit from the plant.
- Harvesting fruits when temperature exceeds 32°C may cause the fruit to ripen very quickly.



Bacterial damage of tomatoes.

3. Cleaning and sorting

- Cleaning can be done manually by rubbing the fruit surface with a soft damp cloth. If the tomatoes are very dirty, wash with potable water and then air dry the fruit under a shaded area.
- Before washing take out the spoiled fruit in order to avoid contamination to the other fruit, as tomato fruit is very susceptible to bacterial damage, notably the bacteria *Erwinia*.
- If there is no potable water, use Sodium Hypochlorite at a concentration of 150 ppm (15g/L) as a sanitizing agent so the water is maintained at a pH of 6.5 for effective



Grading based on color.

cleaning.

- After harvesting, the fruit is generally placed in the shade for about 20 minutes then sorted into 3 groups according to color and fruit size.

4. Packing for transport

- Tomatoes should be packed in strong, well-ventilated containers such as wooden containers, durable plastic crates, or bamboo baskets. The container should have protective padding such as banana leaves to cushion the fruit and prevent scarring and abrasions.
- The fully loaded container should be taken to a shaded, well-ventilated temporary holding area.
- Avoid overloading if using bamboo baskets and never load over 70 kgs. into a basket which will cause damage to the fruit by compression.



Cleaned and sorted tomatoes ready for transport.

5. Transporting

- The best way is to arrange the containers is on a shelf to avoid piling on top of each other.
- Use a cloth to cover the basket to protect fruit from sunlight and dust.
- The vehicle used for transporting to the market should either have refrigeration or at least have a roof to protect it from direct sunlight.

6. Storage

- Keep in a cool place under the house or in shaded, well-ventilated areas.
- Tomato is susceptible to water loss during storage, therefore use a wet cloth to cover the baskets
- Frequently sprinkle the cloth with clean water to keep the fruit cool and maintain freshness.
- For long periods of storage (up to 10 days), tomato should be stored at 12-16°C with a relative humidity of 90-95%.

7. Nutrition Value

Tomatoes are very good sources of vitamins A and C, nutrients that help protect your body against infections and maintain healthy skin, teeth and internal organs. One medium-size tomato represents 20%-25% of the daily requirements for these vitamins. Tomatoes are also a good source of dietary fiber and are low in fat with no cholesterol – making them a heart-healthy food.

Cambodia HARVEST

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